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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/517,202	01/10/2005	Ulrik Mehr	66722-065-7	7598

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EXAMINER

SAUNDERS JR, JOSEPH

ART UNIT PAPER NUMBER

2631

DATE MAILED: 09/14/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/517,202	Applicant(s) MEHR, ULRİK	
	Examiner Joseph Saunders	Art Unit 2631	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10 January 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-4 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-4 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 10 January 2005 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>12-08-04</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This is the initial office action based on the application filed on June 16, 2003.

Claims 1 – 4 are currently pending and considered below.

Drawings

2. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference sign(s) mentioned in the description: d3 in figure 3 as mentioned on page 3 line 26 of the specification.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

3. The abstract of the disclosure does not commence on a separate sheet in accordance with 37 CFR 1.52(b)(4). A new abstract of the disclosure is required and must be presented on a separate sheet, apart from any other text.

4. The disclosure is objected to because of the following informalities: In the brief description of the drawings Figure 3 (sectional view) and Figure 4 (side view) are both labeled as corresponding to Figure 2. However, on page 3 lines 25 – 27 the applicant states that the same corresponding perpendicular measures in figure 3 are smaller than those of figure 4. If figure 3 and figure 4 are both of figure 2 and refer to the same points then they should be the same size.

Appropriate correction is required.

Claim Rejections - 35 USC § 112

5. Claim 1 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Regarding claim 1, the applicant uses the language "Suspension means (1,10) for transducer" as if possibly trying to invoke 35 U.S.C. 112 sixth paragraph, however the examiner believes that the language "Suspension means (1,10) for transducer" fails to invoke 35 U.S.C. 112 sixth paragraph since the claim itself provides sufficient structure with respect to reference characters (1, 10) and later when applicant states that the "suspension means (1, 10) is shaped as a tube...". The applicant again appears to try to invoke 35 U.S.C. 112 sixth paragraph when stating "means for forming a connection" with reference to both the first and second end of the tube. With respect to the first end (outlet of the transducer) the examiner believes the applicant has successfully invoked 35 U.S.C. 112 sixth paragraph and the examiner will

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interpret the "means for forming a connection" as in the specification page 3 lines 2 – 3 where applicant states ""At the other end the suspension is shaped to fit snugly around the snout part of a hearing aid receiver." With respect to the second end (wall of the cabinet) the examiner believes the applicant has successfully invoked 35 U.S.C. 112 sixth paragraph and the examiner will interpret the "means for forming a connection" as in the specification page 3 lines 1 – 2 where applicant states that the suspension "may be held in place by suitable fastening means within the shell of the hearing aid".

Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

7. Claims 1 and 4 are rejected under 35 U.S.C. 102(b) as being anticipated by Posen et al. (5,864,628).

Claim 1: Posen discloses suspension means (1, 10) (tube 22) for a transducer (receiver 16), where the suspension means (1,10) also functions as a sound-guide for directing sound between the transducer and an external cabinet (shell 12) of an audio processing device (hearing aid 10), wherein the suspension means (1,10) is shaped as a tube (tube 22) which has means for forming a connection with an inlet/outlet of the transducer at a first end (tube 22 placed over connector 824 at output of receiver 12)

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and means for forming a connection with a wall (15) of the cabinet of the audio processing device at a second end (tube 22 contained within opening of shell 12 with barrier 24 press-fitted inside) in order to guide sound through the tube (column 3 line 61 – column 4 line 15), where an intermediate part of the tube in a length direction has alternating wide and narrow parts (wide segments of tube 22 where attenuator 924 is absent surrounds narrow part of tube where attenuator 924 is positioned) (Column 6 Lines 56 – 61 and Figures 6 and 15).

Claim 4: Posen discloses suspension means as claimed in claim 1, including at least two consecutive sections, each comprising a wide and a narrow part, (wide segments of tube 22 where attenuator 924 is absent surrounds narrow part of tube where attenuator 924 is positioned and barrier 224 includes a plurality of undulations, shown as a thread 260, formed in the interior surface 262 thereof) (Column 6 Lines 56 – 61, Column 5 Lines 40 – 46, and Figures 6, 8, 9, and 15) where the consecutive sections are shaped to have unlike resonance frequencies (“the peak output frequency can be shifted by selecting a housing with a different diameter”) (Column 9 Lines 9 – 11).

Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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9. Claims 2 and 3 are rejected under 35 U.S.C. 103(a) as being unpatentable over Posen et al. (5,864,628).

Claim 2: Posen discloses suspension means as claimed in claim 1, but does not disclose where the wide and narrow parts are shaped as circumferentially extending-bellows. Posen does disclose where "barrier 224 includes a plurality of undulations, shown as a thread 260, formed in the interior surface 262 thereof" (Column 5 Lines 40 – 46, and Figures 8 and 9) barrier 224 is one of various embodiments to element 124 which can function as an attenuator or a wax guard when "positioned in the tube 22 intermediate the barrier 24 and the connector 824" (Column 5 Lines 7 – 11, Figure 6). Since attenuator 924 has the same external structure as disclosed attenuator 124 and barrier 224 is one of various embodiments of element 124, it would be obvious to one of ordinary skill in the art at the time of the invention to use the inner cylindrical structure of barrier 224 which has a plurality of undulations in place of attenuator 924 since barrier 224 would also allow for the prevention of ear wax while functioning as an attenuator.

Claim 3: Posen discloses suspension means as claimed in claim 1, but does not disclose wherein a circumference of the tube is oval shaped. Posen only discloses that housing of acoustic attenuator and wax barrier includes an exterior wall surface having a substantially cylindrical portion of predetermined diameter (abstract). It would be obvious to one of ordinary skill in the art at the time of the invention that the suspension of Posen could be of oval shape, since an oval shape is substantially cylindrical and

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would allow the suspension means the flexibility necessary to connect elements of slightly irregular shape thereby allowing the hearing aid to better accommodate differences with regards to the shape and size of the human ear.

Conclusion

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

- a. Weiss et al. (4,927,488) discloses an earwax barrier and acoustic attenuator for a hearing aid.
- b. Carbe et al. (5,278,360) discloses a hearing aid wax guard with integral bridge.
- c. Schlaegel et al. (5,975,235) discloses a filter disposed in a continuous-flow earmold tubing connector.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joseph Saunders whose telephone number is (571) 270-1063. The examiner can normally be reached on Monday - Thursday, 9:00 a.m. - 4:00 p.m., EST.

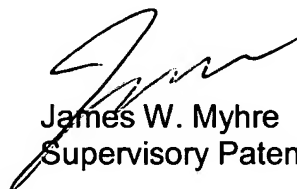
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James Myhre can be reached on (571) 270-1065. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



JS
8-31-06



James W. Myhre
Supervisory Patent Examiner